



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/603,918

06/25/2003

Michael See

134101

4348

81352 7590
RG and Associates
1103 Twin Creeks
Allen, TX 75013

03/17/2011

EXAMINER

HOSSAIN, TANIM M

ART UNIT

PAPER NUMBER

2445

NOTIFICATION DATE

DELIVERY MODE

03/17/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

michele.zarinelli@gmail.com
patentpatent@gmail.com

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (U.S. 2002/0059407) in view of Herrmann (U.S. 2001/0032259), in further view of Motoyama (U.S. 2004/0049552).

As per claim 1, Davies teaches a method of managing one or more local resource properties, each having a value, by one or more managed network devices in a network comprising a network management system and a central data store, the method comprising the steps of: (a) monitoring the value of said one or more local resource properties (Abstract; paragraphs 0012, 0017); querying the local resource properties, determining a state, value, and quality of the local resource properties (paragraphs 0012-0014); generating a learning event report comprising the value of at least one of the one or more local resource properties (paragraphs 0019, 0054); and transmitting the learning event report to the central data store, wherein the value of at least one of the one or more local resource properties is recorded at the central data store and made available to the network management system for asynchronous processing (paragraphs 0055-0056, 0061, 0067); wherein the value of at least one of the one or

Art Unit: 2445

more local resource properties is uploaded by the one or more managed network devices, via a local resource manager (paragraphs 0067, 0098).

While suggested by the discussion of asynchronous communications, Davies does not per se disclose that the local properties are uploaded via a local resource manager independent of the retrieval of the value by the network management system. Herrmann teaches that the local resource properties are uploaded via a local resource manager independent of the retrieval of the value by the network management system, as claimed (paragraphs 0035, 0039, 0047-0048). It would have been obvious to one of ordinary skill in the art at the time of the invention to explicitly include the uploading to a management system independently, as taught by Herrmann in the system of Davies. The motivation for doing so lies in the fact that independent, asynchronous communication allows for the system to perform other tasks without having to wait for responses to requests, which increases the efficiency of the networks. Davies suggests this concept, which therefore renders the specific inclusion of this concept through Herrmann obvious to one of ordinary skill. Both inventions are from the same field of endeavor, namely monitoring networks.

Davies-Herrmann does not specifically teach the assessment of priorities to the local resource properties and including a priority test of the event. Motoyama teaches the assessment of a priority of the local resource properties (Abstract; paragraphs 0012-0013), and generating a priority test of a learning event of the resource properties, where the uploading frequency of a learning event report is determined based on a priority of a learning event associated with the learning event report (0063, 0081, 0082, 0089). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to assess a priority of the

Art Unit: 2445

properties, and generate a priority test of an event, where the uploading frequency of an event report is determined based on the priority of the event, as claimed, as taught by Motoyama in the system of Davies-Herrmann. The motivation for doing so lies in the fact that more urgent event occurrences would require immediate attention, which would therefore require a report uploading to be synchronized with the urgent event. This urgent event would thus govern the frequency of the event report, which would allow an administrator to attend to the event as quickly as possible, for example. All inventions are from the same field of endeavor, namely network monitoring.

As per claim 2, Davies-Herrmann-Motoyama teaches the method of claim 1, wherein the central data store is a directory server (Davies: Figure 5; paragraph 0054).

As per claim 3, Davies-Herrmann-Motoyama further teaches that the step of transmitting the learning event report to the central data store comprises the step of exchanging one or more Lightweight Directory Access Protocol messages (Davies: Figure 5; paragraph 0054).

As per claim 4, Davies-Herrmann-Motoyama further teaches that the one or more local resource properties comprise one or more internal resource properties (Davies: 0019).

As per claim 5, Davies-Herrmann-Motoyama further teaches that the one or more internal resource properties comprise one or more properties selected from the group consisting of: managed network device hardware configurations including network modules installed; managed network device software installations including the types of software, software version levels, and the date when such information was last updated; and managed network device identity information including device name, serial number of the chassis or primary management processor, location information, type of device, network interface module name, network

Art Unit: 2445

interface module slot number, network interface module part number, network interface module hardware revision level, network interface module serial number, and network interface module date of manufacture (Davies: 0019, 0054).

As per claim 6, Davies-Hermann-Motoyama further teaches that the one or more local resource properties comprise one or more connectivity properties (Davies: 0019, 0054).

As per claim 7, Davies-Hermann-Motoyama further teaches that the one or more connectivity properties comprise properties selected from the group consisting of the OSI network model layer 2 and layer 3 addresses of an edge device, identification of the network interface module where the edge device is connected, speed of a port where the edge device is connected, one or more network protocols being used by the edge devices or systems, and an administrative and operational state of the link connecting to the edge device (Davies: 0019, 0054, 0098).

As per claim 8, Davies-Hermann-Motoyama further teaches that the step of monitoring comprises the steps of detecting one or more learning events and periodically polling for a current value of the one or more local resource properties (Davies: 0017).

As per claim 9, Davies-Hermann-Motoyama teaches periodically polling for a value, but does not specifically teach the use of specific 5 second to 5 minute intervals. Davies teaches the polling intervals are variable and configurable as needed (paragraphs 0068-0070). Official Notice is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to include the specific intervals at which to poll for information, as specific polling intervals constitute design choices and would have been obvious to one of ordinary skill in the art to include.

Art Unit: 2445

As per claim 10, Davies-Hermann-Motoyama further teaches that the learning event report consists essentially of a value of at least one of the one or more local resource properties different from the value of the at least one of the one or more local resource properties of a preceding learning event report (Herrmann: 0040, 0048). The motivations to combine teachings are the same as those set forth for claim 1.

As per claim 11, Davies-Hermann-Motoyama further teaches that the method further includes, after the step of detecting one or more learning events, assessing the priority of the learning event detected (Motoyama: Abstract). The motivations to combine teachings are the same as those set forth for claim 1.

As per claim 12, Davies-Hermann-Motoyama further teaches that the method further includes, after assessing the priority of the learning event detected, transmitting the learning event report to the central data store substantially immediately (Herrmann: 0040, 0048). The motivations to combine teachings are the same as those set forth for claim 1.

As per claim 13, Davies-Hermann-Motoyama further teaches that the method further includes, prior to monitoring value of one or more local resource properties, the step of acquiring the most recent value of each of the one or more local resource properties from an internal memory when the one or more managed network devices are initialized (Herrmann: 0040, 0048). The motivations to combine teachings are the same as those set forth for claim 1.

Claim 14 is rejected on the same bases as claim 1, as the instant claim discloses limitations similar to the earlier claim.

Art Unit: 2445

As per claim 15, Davies-Hermann-Motoyama further teaches that the central data store is a directory server enabled to exchange one or more Lightweight Directory Access Protocol (Davies: Figure 5; paragraph 0054).

Claims 16-19 are rejected under Davies-Hermann-Motoyama on the same bases as claims 4-7 respectively, as the instant claims disclose limitations similar to those of the earlier claims.

As per claim 20, Davies-Hermann-Motoyama further teaches that the managed network device is a switching device further comprising: (a) a plurality of network interface modules (Davies: Abstract); (b) one or more packet processors for performing packet parsing and ingress packet processing necessary to perform switching routing (Davies: 0067); and (c) one or more memory devices for retaining one or more rules sets for switching and routing (Davies: 0054).

As per claim 21, Davies teaches an asynchronous network resource management system comprising: (a) at least one central data store (Davies: 0055-0056, 0061, 0067); (b) one or more local resource properties, each having a value (Davies: 0055-0056, 0061, 0067); (c) a plurality of managed network devices adapted to monitor the value of each of the one or more local resource properties, query the local resource properties, determine a state, the value, and quality of the local resource properties and assessing a priority of the local resource properties (Davies: 0055-0056, 0061, 0067); and transmit the value of each of the one or more local resource properties to the at least one central data store (Davies: 0055-0056, 0061, 0067); and (d) at least one network management system adapted to retrieve the value of each of the one or more local resource properties from the at least one central data store, wherein the value of at least one of the one or more local resource properties is uploaded by the one or more managed network devices, via a local resource manager (Davies: 0055-0056, 0061, 0067).

Art Unit: 2445

While suggested by the discussion of asynchronous communications, Davies does not per se disclose that the local properties are uploaded via a local resource manager independent of the retrieval of the value by the network management system. Herrmann teaches that the local resource properties are uploaded via a local resource manager independent of the retrieval of the value by the network management system, as claimed (paragraphs 0035, 0039, 0047-0048). It would have been obvious to one of ordinary skill in the art at the time of the invention to explicitly include the uploading to a management system independently, as taught by Herrmann in the system of Davies. The motivation for doing so lies in the fact that independent, asynchronous communication allows for the system to perform other tasks without having to wait for responses to requests, which increases the efficiency of the networks. Davies suggests this concept, which therefore renders the specific inclusion of this concept through Herrmann obvious to one of ordinary skill. Both inventions are from the same field of endeavor, namely monitoring networks.

Davies-Herrmann does not specifically teach the assessment of priorities to the local resource properties and including a priority test of the event. Motoyama teaches the assessment of a priority of the local resource properties (Abstract; paragraphs 0012-0013), and generating a priority test of a learning event of the resource properties, where the uploading frequency of a learning event report is determined based on a priority of a learning event associated with the learning event report (0063, 0081, 0082, 0089). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to assess a priority of the properties, and generate a priority test of an event, where the uploading frequency of an event report is determined based on the priority of the event, as claimed, as taught by Motoyama in the

Art Unit: 2445

system of Davies-Herrmann. The motivation for doing so lies in the fact that more urgent event occurrences would require immediate attention, which would therefore require a report uploading to be synchronized with the urgent event. This urgent event would thus govern the frequency of the event report, which would allow an administrator to attend to the event as quickly as possible, for example. All inventions are from the same field of endeavor, namely network monitoring.

Claims 22-25 are rejected under Davies-Herrmann-Motoyama on the same bases as claims 4-7 respectively, as the instant claims disclose limitations similar to those of the earlier claims.

Response to Remarks

Applicant's remarks filed on December 29, 2010 have fully been considered.

a. Applicant asserts that Motoyama does not disclose any priority assessments or tests, nor priority tests based on a learning event. Examiner respectfully disagrees. Paragraph 0013 teaches that "when it is **determined** that urgent service is needed by a network resource, the network resource may send a status message directly to the resource manager." This determination constitutes the inherent test the system makes with respect to whether the status message needs to be sent directly to the resource manager. Further, paragraph 0089 teaches that the system "determines if an event requires communication," and what mode of communication would be proper. This too constitutes a priority test regarding whether an event warrants communication, and if so, what type. The priority test in Motoyama is therefore clearly based on the event and the local resource properties associated with it.

Art Unit: 2445

b. Applicant maintains that Motoyama does not teach “wherein a frequency of uploading the learning event report is determined based on a priority of a learning event associated with the learning event report.” Examiner respectfully disagrees.

Paragraph 0089 teaches a scenario in which the system transmits weekly or monthly reports indicating the usage and normal condition state of the machine. However, in the case that a high priority event occurs in which “immediate attention” is needed or an event which is desired on an “expedited basis”, it is sent through a connection mode of transmission, independent of the weekly or monthly reports. Motoyama further states that this communication may be used, for example, when a hazardous connection exists within a machine, or if the machine needs immediate attention, such as if a high and unsafe temperature is sensed. All of these examples illustrate urgency and time-sensitivity, and such events would clearly be sent at a frequency determined by their occurrence and priority.

c. Applicant further asserts that “in contrast to the teachings of the present application, Motoyama explicitly recites that the schedule [of transmitting messages] is fixed and only the connection medium is changed.” Examiner respectfully disagrees.

As discussed above, Motoyama, in paragraph 0089, teaches the first determination of whether an event requires communication, followed by determining what type of communication it requires. In the example, Motoyama states that an event is sent in a connection mode if it requires immediate attention. The immediacy of the attention required clearly constitutes that the event transmission schedule is not fixed. As an example, Motoyama discloses that a high and unsafe temperature event at a machine is such an event that requires immediate attention.

Art Unit: 2445

Motoyama further discloses that reports indicating normal usage and condition of that machine are sent weekly or monthly.

For example, the normal usage reports may be sent every Monday. By asserting that the sending of communications in Motoyama is on a fixed schedule, and that only the connection medium is changed, Applicant is essentially asserting that if the high and unsafe temperature event, requiring immediate attention, occurs on a Tuesday, for example, the system would wait until the following Monday to send the event (in connection mode). This would clearly defeat the purpose of the Motoyama invention, rendering it useless in the handling of urgent events. This is certainly not the case.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2445

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim M. Hossain whose telephone number is (571)272-3881.

The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tanim Hossain
Patent Examiner
Art Unit 2445

/HASSAN PHILLIPS/
Primary Examiner, Art Unit 2445